

State: Arizona	Materials: 2021 Stored Specifications "1005PG, 06/19/25" and "1009ARMTL, 07/21/22" – Asphalt-Rubber Material
Date Last Reviewed: 12/01/25	Web Address: https://azdot.gov/business/contracts-and-specifications/specifications-pay-items-list
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Asphalt Binder		
Section 1005-3.01	Highlights	Asphalt cement shall be a performance grade (PG) asphalt binder conforming to the requirements of AASHTO M 320.
	Notes	If Terminal Blend rubberized binder (PG XX-XXTR+) or Polymer Modified Asphalt binder (PG XX-XXPM) is used, it shall conform to the requirements of Table 1005-1a and 1005-1b.
	Exclusions and Limits	Air blown/oxidized asphalt, Polyphosphoric acid (PPA) modification and re-refined/recycled engine oil bottom (REOB) will not be accepted. The pressure aging temperature for all binders, including Terminal Blend rubberized binder and Polymer modified asphalt binder shall be as specified below:
		PG Asphalt Binder
PG70-XX and above		110°C
	PG64-XX and below	100°C

TABLE 1005-1a Terminal Blend rubberized binder (XX-XXTR+)				
Test Property	Test Method	Requirement	Test Result	Percent of Contract Unit Price Allowed
Solubility, %, minimum	ASTM D7553 or ASTM 2042	98	-----	-----
Elastic Recovery, @ 10°C, %, minimum	AASHTO T 301	75	75	100
			70 - 74	80
			< 70	65 (1)

(1) Reject Status: The pay adjustment applies if allowed to remain in place.

Notes: In case of dispute, ASTM D2042 shall be used to determine the Solubility.

The asphalt binder shall contain a minimum of 8 percent crumb rubber and a minimum of 3 percent SBS (styrene-butadiene-styrene) polymer. The crumb rubber shall be derived from processing whole scrap tires or shredded tire materials. The tires from which the crumb rubber is produced shall be taken from automobiles, trucks, or other equipment owned and operated in the United States. The processing shall not produce, as a waste product, casings or other ground tire material that can retain moisture when stored or disposed of above ground.

Modified binders shall be blended at the source of supply and delivered as a homogenous mixture to the job site.

Modified Binders stored at the asphalt concrete mixing plant for more than two weeks or beyond the supplier recommended shelf life, whichever is less, shall be sampled and tested.

To ensure the most accurate and current information, the specific agency should be contacted.



TABLE 1005-1b Polymer Modified Asphalt Binder (XX-XXPM)				
Test Property	Test Method	Requirement	Test Result	Percent of Contract Unit Price Allowed
Solubility, %, minimum	ASTM D7553 or ASTM 2042	98	-----	-----
Elastic Recovery, @ 10°C, %, minimum	AASHTO T 301	75	75 70 - 74 < 70	100 80 65 (1)
(1) Reject Status: The pay adjustment applies if allowed to remain in place.				
Notes: In case of dispute, ASTM D2042 shall be used to determine the Solubility. Asphalt binder shall contain a minimum of 3 percent SBS (styrene-butadiene-styrene) polymer. Modified binders shall be blended at the source of supply and delivered as a homogenous mixture to the job site. Modified Binders stored at the asphalt concrete mixing plant for more than two weeks or beyond the supplier recommended shelf life, whichever is less, shall be sampled and tested.				

Arizona		Table 1009-2 : CRA Specifications (1)			
Property		Test Method: AASHTO (T), ASTM (D) or other	Requirements by Performance Grade		
			CRA Type 1 (Base: 64-16)	CRA Type 2 (Base: 58-22)	CRA Type 3 (Base: 52-28)
ORIGINAL					
Rotational Viscosity: 177°C (350°F); (ASTM D7741); Pascal·seconds	350°F	D7741 See AZ Spec. 1009-2.03	1.5-4.0	1.5-4.0	1.5-4.0
Penetration: 4°C (39.2°F), 200 g, 60 sec.;0.1 mm, minimum Penetration, tenths of mm (2)	4°C (39.2°F)	D5	10 min.	15 min.	25 min.
Softening Point: °C, minimum Softening Point, °C (°F)		D53	57 min.	54 min.	52 min.
Resilience, %	25°C (77°F)	D5329	30 min.	25 min.	20 min.
NOTES		1. PG Compliant Base Asphalt + Ground Tire Rubber (minimum 20% by wt. of asphalt cement) 2. Use 200g of weight for test.			

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